FIG. 1

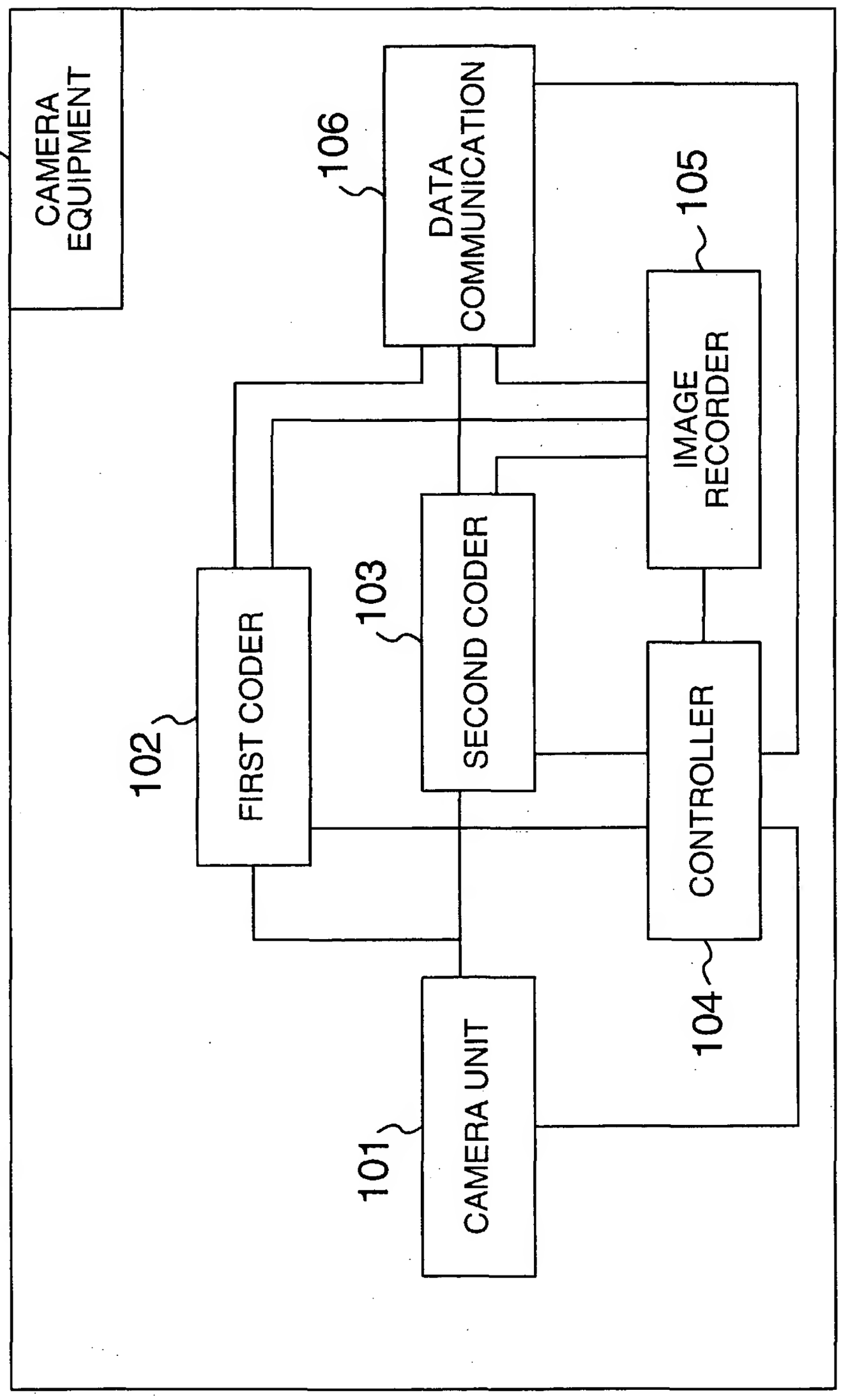

100
CAMERA EQUIPMENT
106
DATA COMMUNICATION
105
IMAGE RECORDER
102
FIRST CODER
103
SECOND CODER
CONTROLLER
104
101
CAMERA UNIT

FIG. 2
PRIOR ART

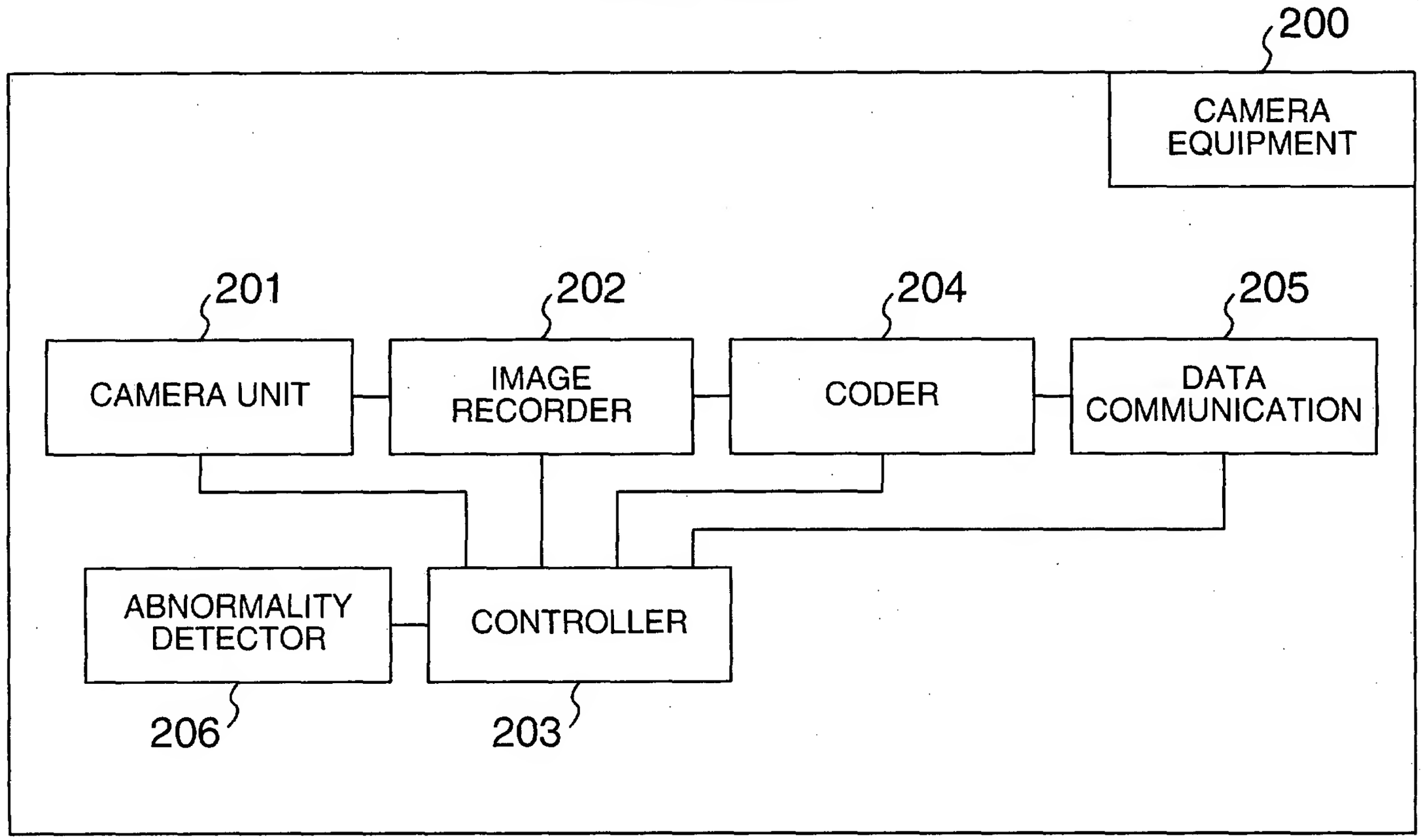


FIG. 3

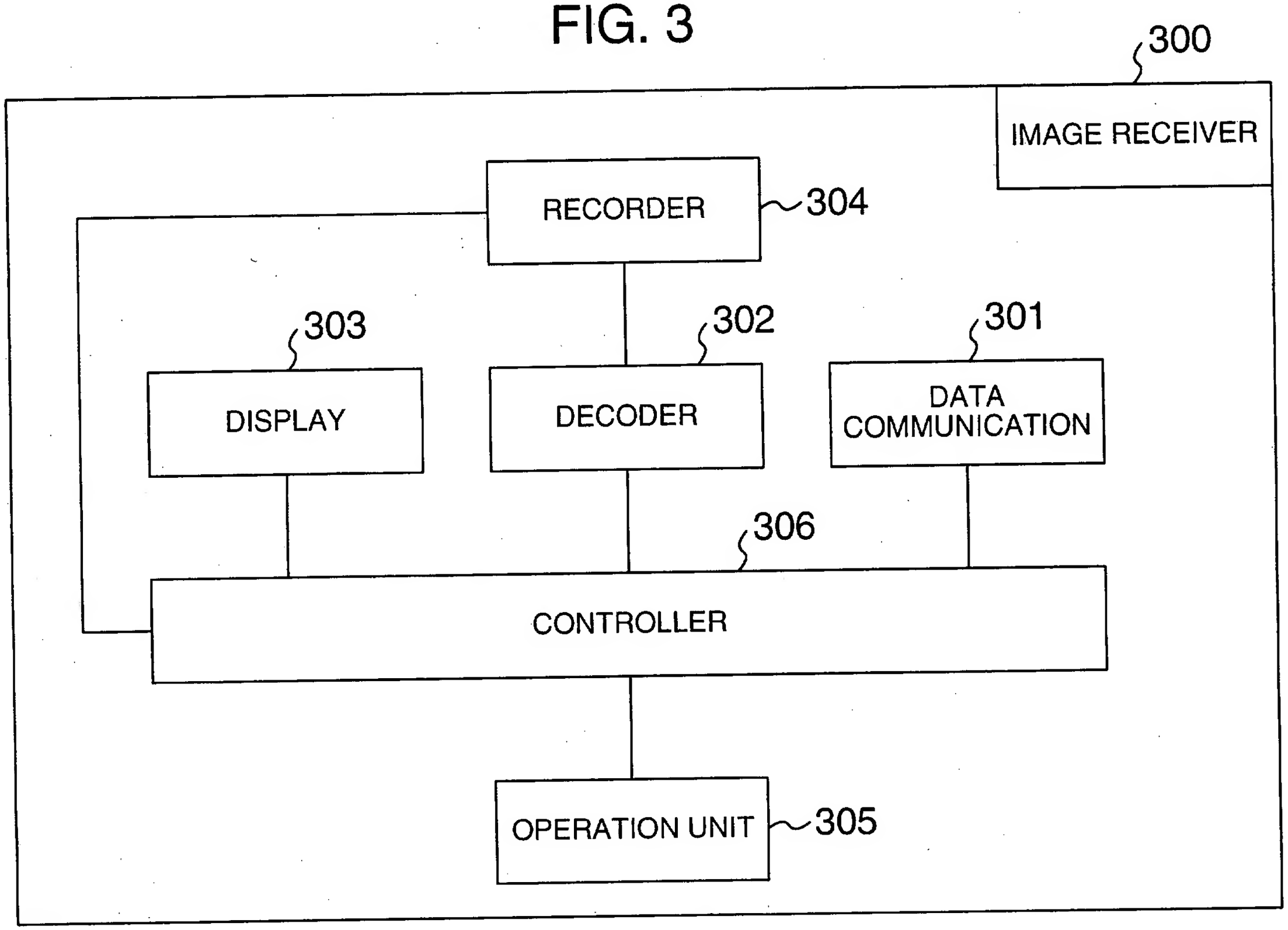

300
IMAGE RECEIVER
RECORDER
304
303
DISPLAY
302
DECODER
301
DATA COMMUNICATION
306
CONTROLLER
OPERATION UNIT
305

FIG. 4

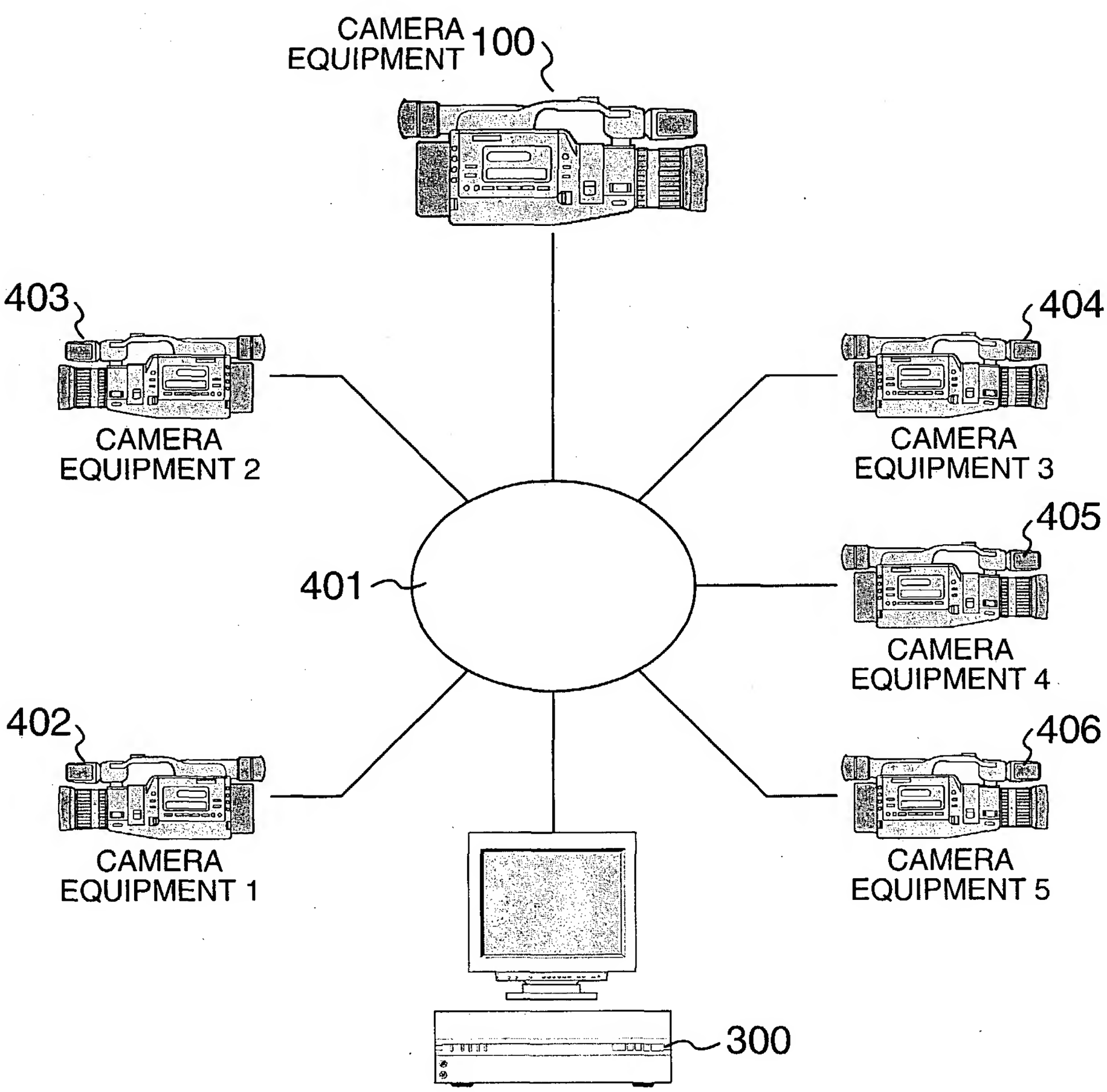

CAMERA EQUIPMENT 100
403
CAMERA EQUIPMENT 2
404
CAMERA EQUIPMENT 3
401
405
CAMERA EQUIPMENT 4
402
406
CAMERA EQUIPMENT 1
CAMERA EQUIPMENT 5
300
IMAGE RECEIVER

FIG. 5

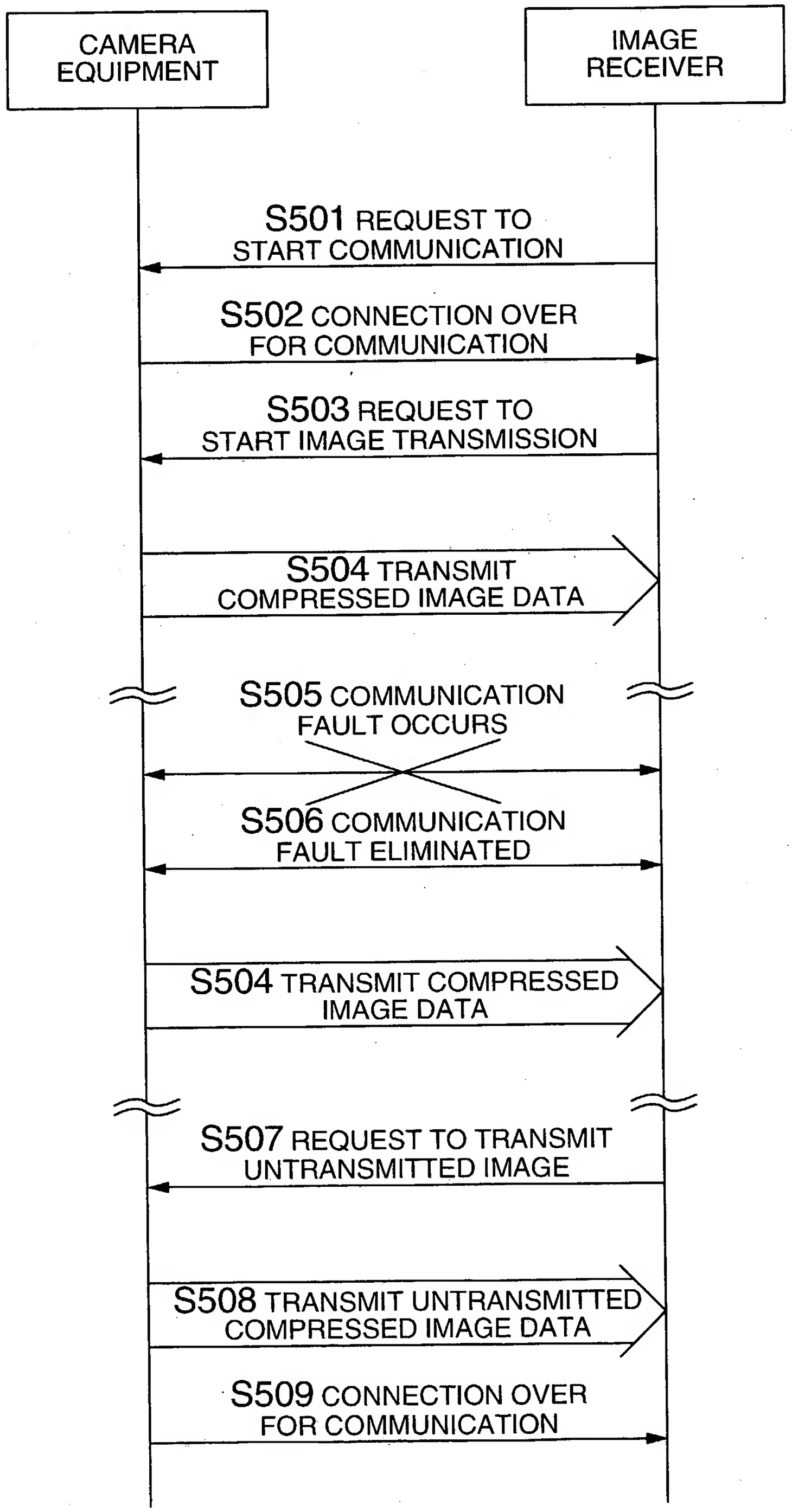

CAMERA EQUIPMENT
IMAGE RECEIVER
S501 REQUEST TO START COMMUNICATION
S502 CONNECTION OVER FOR COMMUNICATION
S503 REQUEST TO START IMAGE TRANSMISSION
S504 TRANSMIT COMPRESSED IMAGE DATA
S505 COMMUNICATION FAULT OCCURS
S506 COMMUNICATION FAULT ELIMINATED
S504 TRANSMIT COMPRESSED IMAGE DATA
S507 REQUEST TO TRANSMIT UNTRANSMITTED IMAGE
S508 TRANSMIT UNTRANSMITTED COMPRESSED IMAGE DATA
S509 CONNECTION OVER FOR COMMUNICATION

FIG. 6

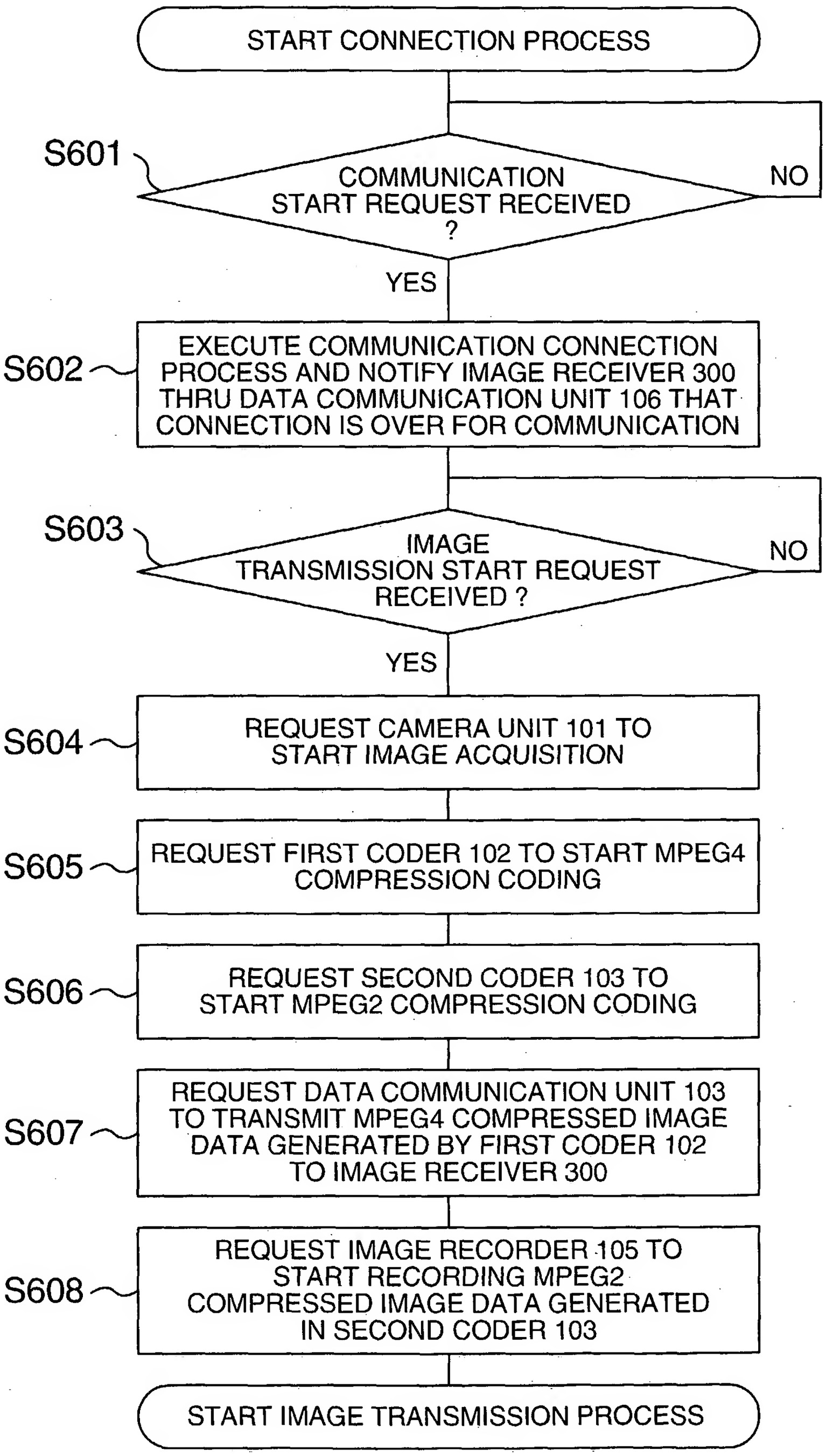

START CONNECTION PROCESS
S601
COMMUNICATION START REQUEST RECEIVED ?
NO
YES
S602
EXECUTE COMMUNICATION CONNECTION PROCESS AND NOTIFY IMAGE RECEIVER 300 THRU DATA COMMUNICATION UNIT 106 THAT CONNECTION IS OVER FOR COMMUNICATION
S603
IMAGE TRANSMISSION START REQUEST RECEIVED ?
NO
YES
S604
REQUEST CAMERA UNIT 101 TO START IMAGE ACQUISITION
S605
REQUEST FIRST CODER 102 TO START MPEG4 COMPRESSION CODING
S606
REQUEST SECOND CODER 103 TO START MPEG2 COMPRESSION CODING
S607
REQUEST DATA COMMUNICATION UNIT 103 TO TRANSMIT MPEG4 COMPRESSED IMAGE DATA GENERATED BY FIRST CODER 102 TO IMAGE RECEIVER 300
S608
REQUEST IMAGE RECORDER 105 TO START RECORDING MPEG2 COMPRESSED IMAGE DATA GENERATED IN SECOND CODER 103
START IMAGE TRANSMISSION PROCESS

FIG. 7

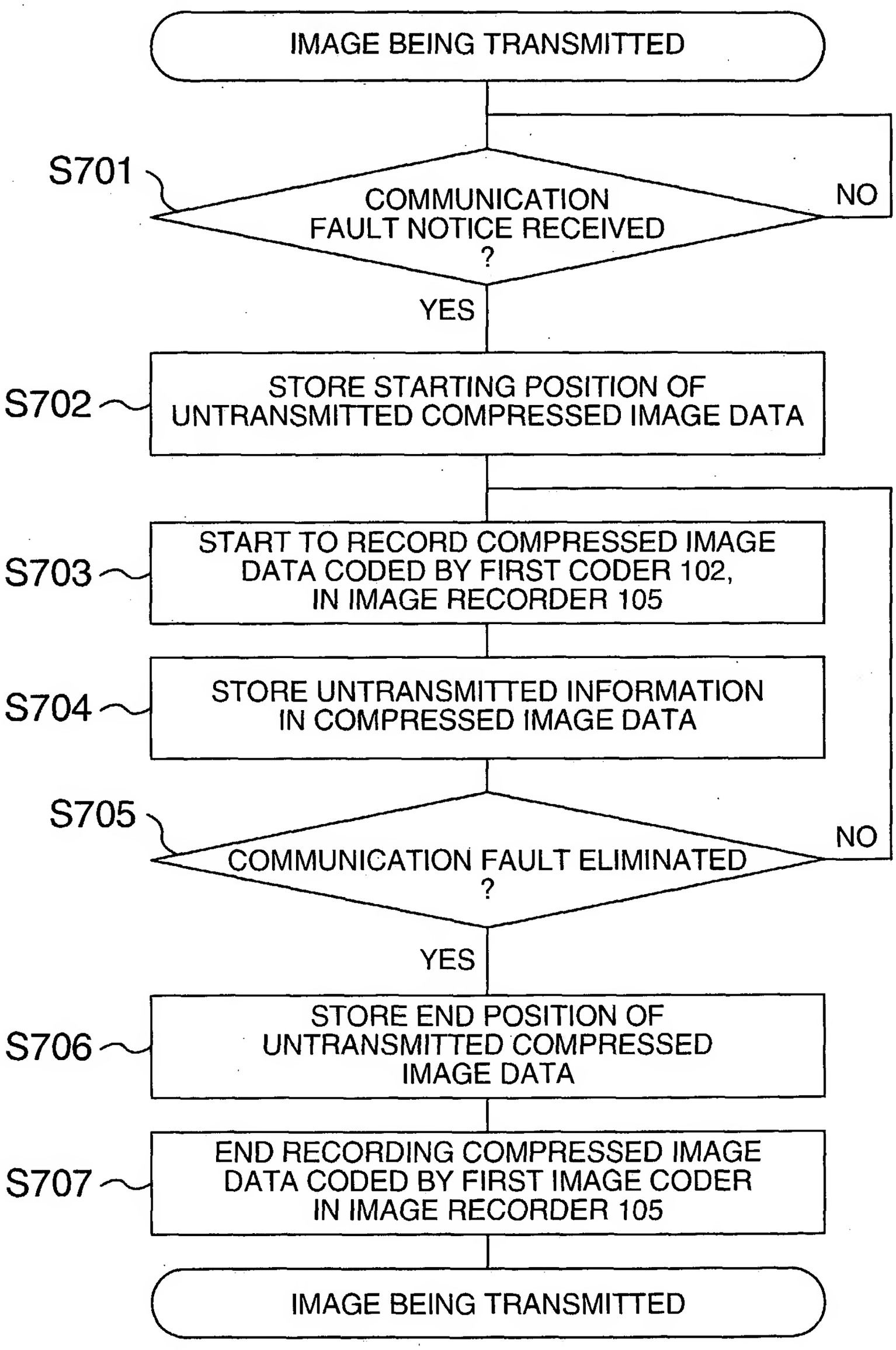


IMAGE BEING TRANSMITTED
S701
COMMUNICATION FAULT NOTICE RECEIVED ?
NO
YES
S702
STORE STARTING POSITION OF UNTRANSMITTED COMPRESSED IMAGE DATA
S703
START TO RECORD COMPRESSED IMAGE DATA CODED BY FIRST CODER 102, IN IMAGE RECORDER 105
S704
STORE UNTRANSMITTED INFORMATION IN COMPRESSED IMAGE DATA
S705
COMMUNICATION FAULT ELIMINATED ?
NO
YES
S706
STORE END POSITION OF UNTRANSMITTED COMPRESSED IMAGE DATA
S707
END RECORDING COMPRESSED IMAGE DATA CODED BY FIRST IMAGE CODER IN IMAGE RECORDER 105
IMAGE BEING TRANSMITTED

FIG. 8

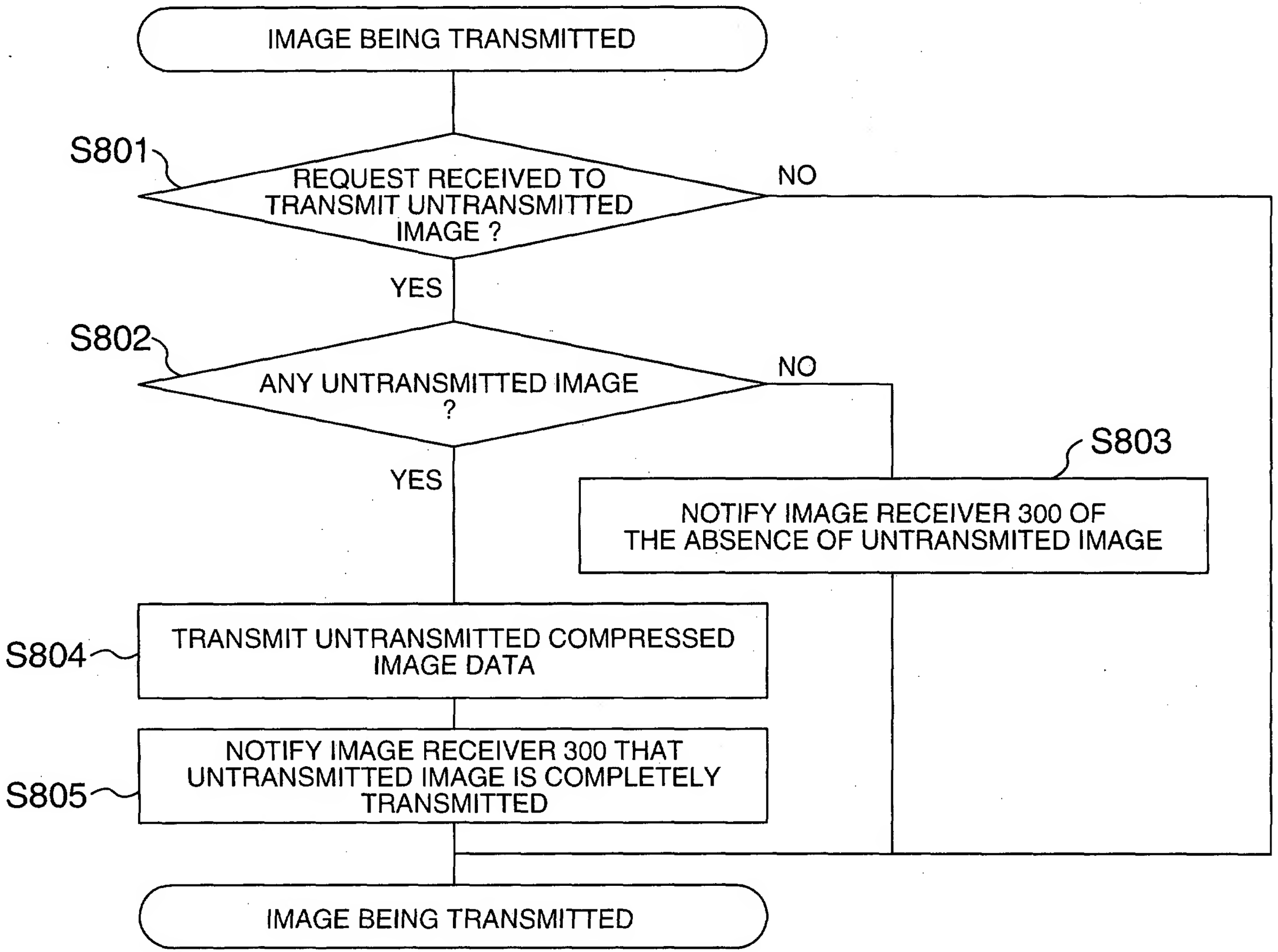


IMAGE BEING TRANSMITTED
S801
REQUEST RECEIVED TO TRANSMIT UNTRANSMITTED IMAGE ?
NO
YES
S802
ANY UNTRANSMITTED IMAGE ?
NO
YES
S803
NOTIFY IMAGE RECEIVER 300 OF THE ABSENCE OF UNTRANSMITED IMAGE
S804
TRANSMIT UNTRANSMITTED COMPRESSED IMAGE DATA
S805
NOTIFY IMAGE RECEIVER 300 THAT UNTRANSMITTED IMAGE IS COMPLETELY TRANSMITTED
IMAGE BEING TRANSMITTED

FIG. 9

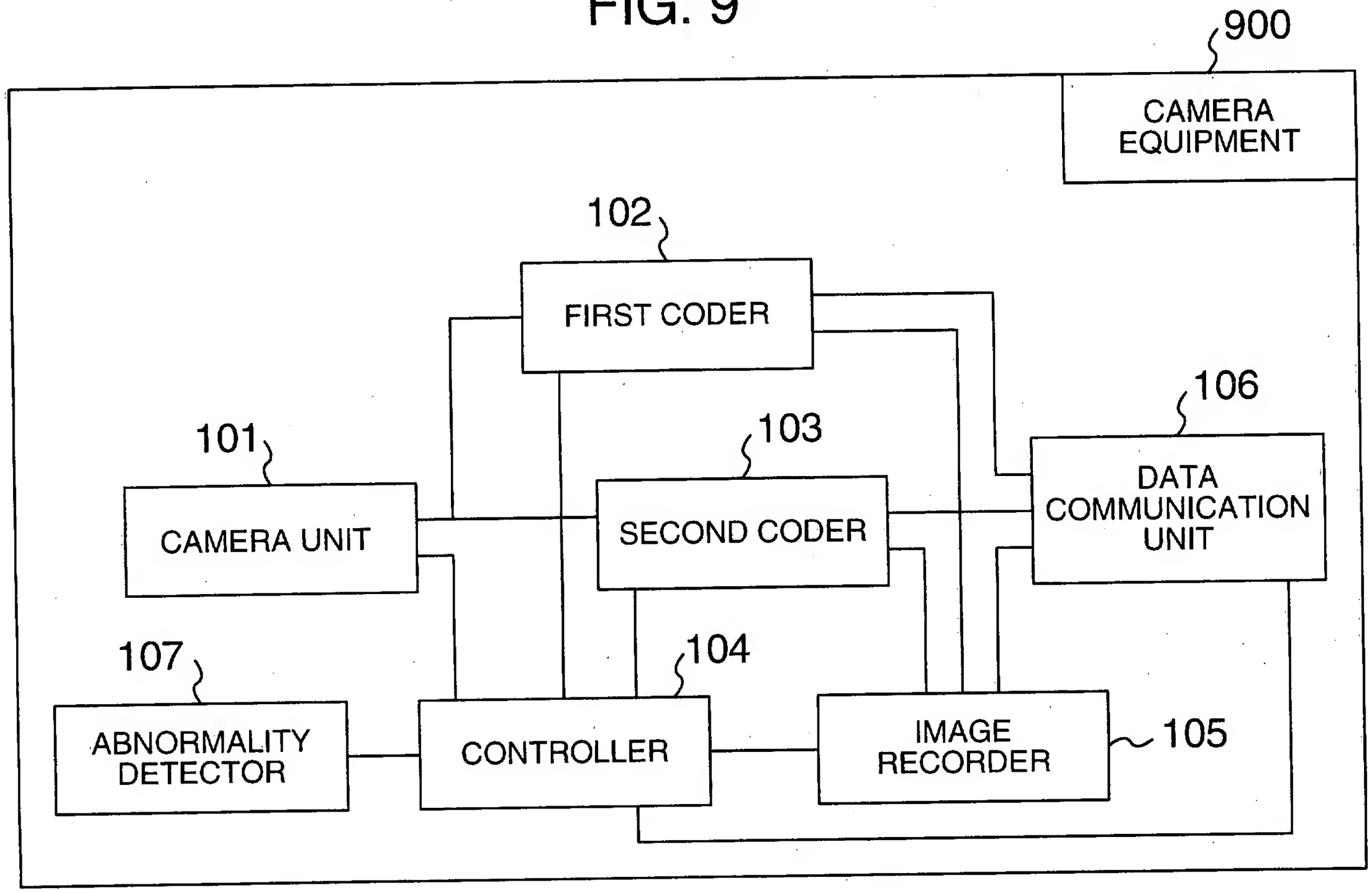

900
CAMERA EQUIPMENT
102
FIRST CODER
106
101
103
CAMERA UNIT
SECOND CODER
DATA COMMUNICATION UNIT
107
104
ABNORMALITY DETECTOR
CONTROLLER
IMAGE RECORDER
105

FIG. 10

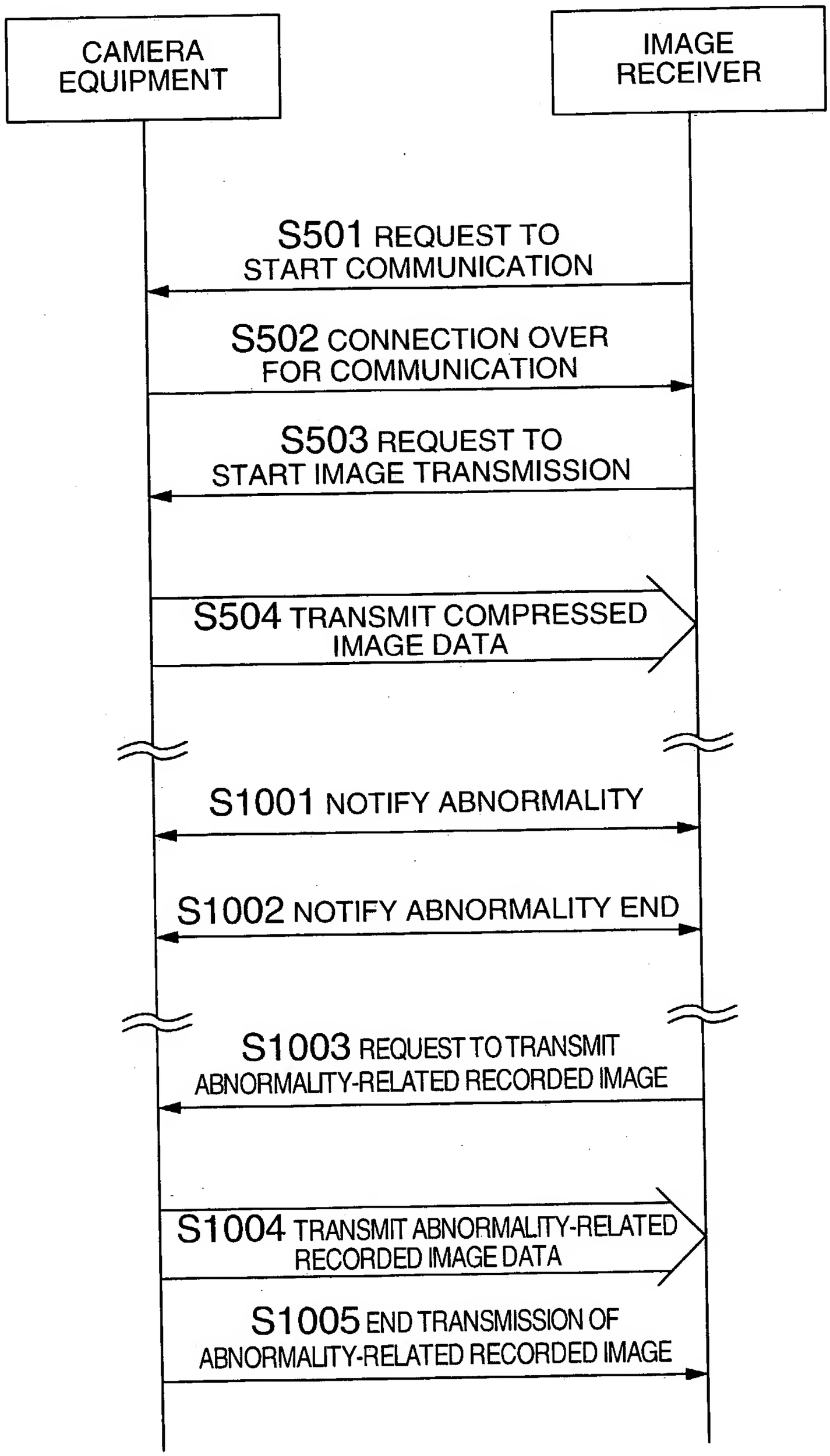

CAMERA EQUIPMENT
IMAGE RECEIVER
S501 REQUEST TO START COMMUNICATION
S502 CONNECTION OVER FOR COMMUNICATION
S503 REQUEST TO START IMAGE TRANSMISSION
S504 TRANSMIT COMPRESSED IMAGE DATA
S1001 NOTIFY ABNORMALITY
S1002 NOTIFY ABNORMALITY END
S1003 REQUEST TO TRANSMIT ABNORMALITY-RELATED RECORDED IMAGE
S1004 TRANSMIT ABNORMALITY-RELATED RECORDED IMAGE DATA
S1005 END TRANSMISSION OF ABNORMALITY-RELATED RECORDED IMAGE

FIG. 11

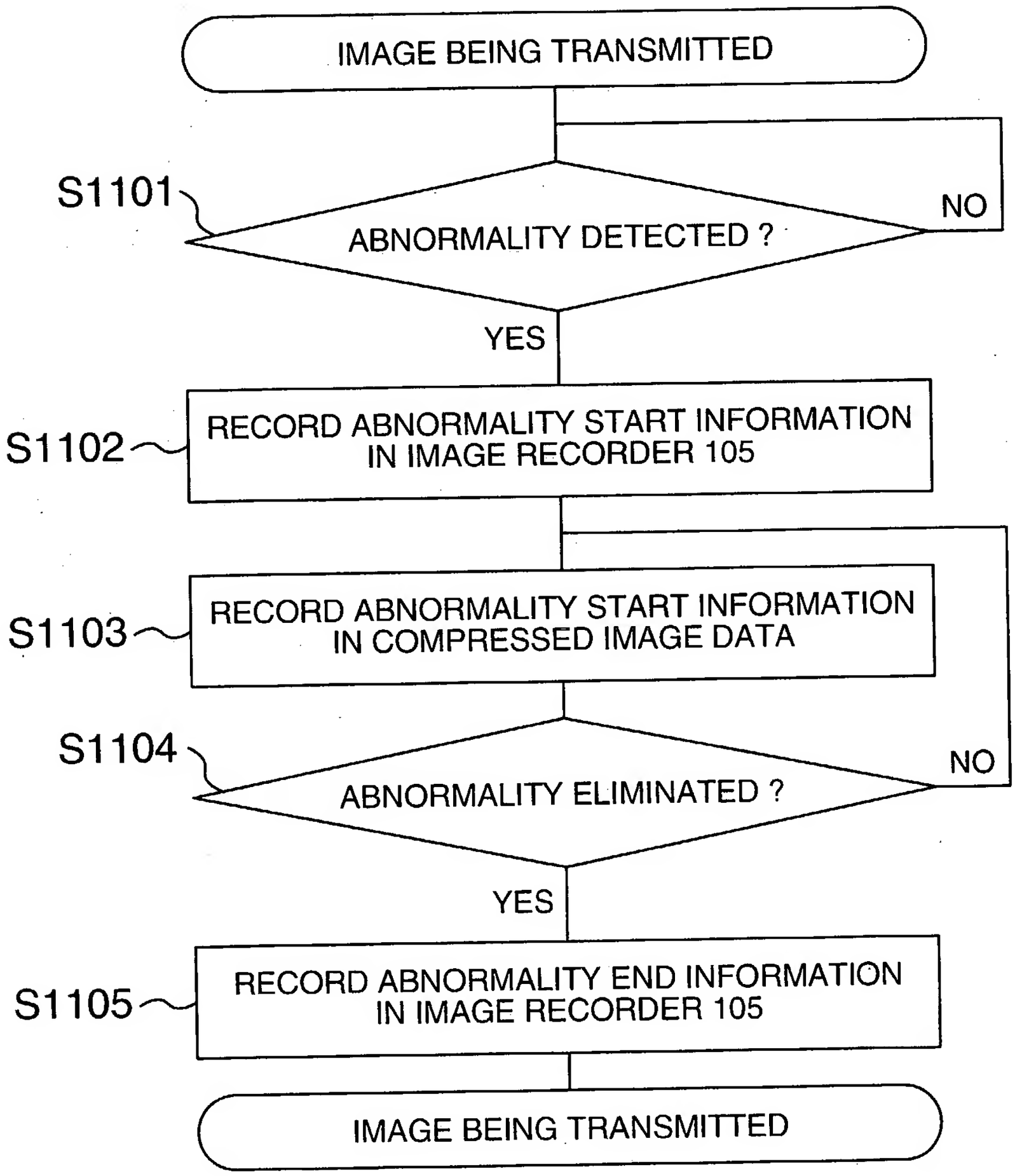


IMAGE BEING TRANSMITTED
S1101
ABNORMALITY DETECTED ?
NO
YES
S1102
RECORD ABNORMALITY START INFORMATION IN IMAGE RECORDER 105
S1103
RECORD ABNORMALITY START INFORMATION IN COMPRESSED IMAGE DATA
S1104
ABNORMALITY ELIMINATED ?
NO
YES
S1105
RECORD ABNORMALITY END INFORMATION IN IMAGE RECORDER 105
IMAGE BEING TRANSMITTED

FIG. 12

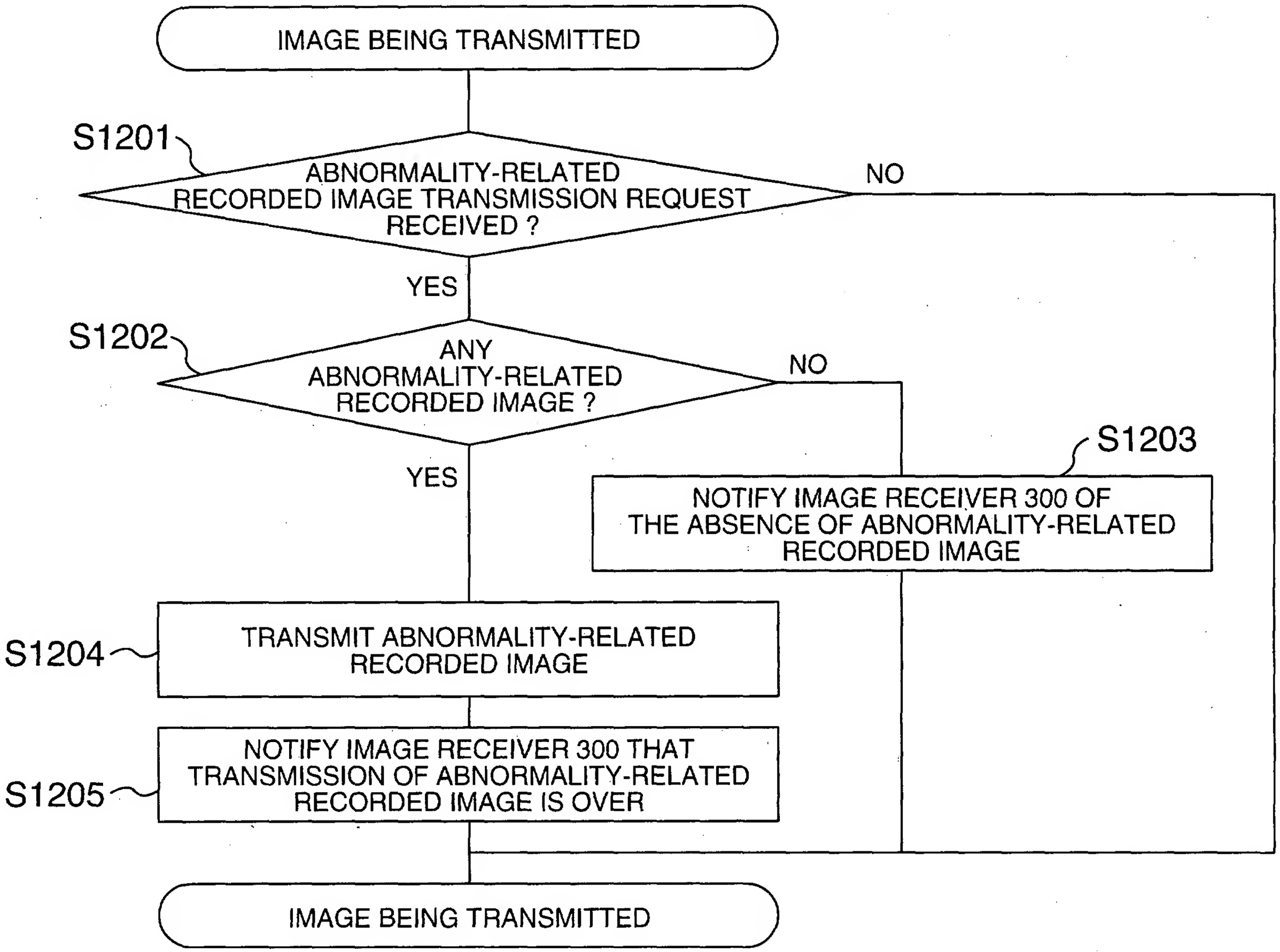


IMAGE BEING TRANSMITTED
S1201
ABNORMALITY-RELATED RECORDED IMAGE TRANSMISSION REQUEST RECEIVED ?
NO
YES
S1202
ANY ABNORMALITY-RELATED RECORDED IMAGE ?
NO
YES
S1203
NOTIFY IMAGE RECEIVER 300 OF THE ABSENCE OF ABNORMALITY-RELATED RECORDED IMAGE
S1204
TRANSMIT ABNORMALITY-RELATED RECORDED IMAGE
S1205
NOTIFY IMAGE RECEIVER 300 THAT TRANSMISSION OF ABNORMALITY-RELATED RECORDED IMAGE IS OVER
IMAGE BEING TRANSMITTED

FIG. 13

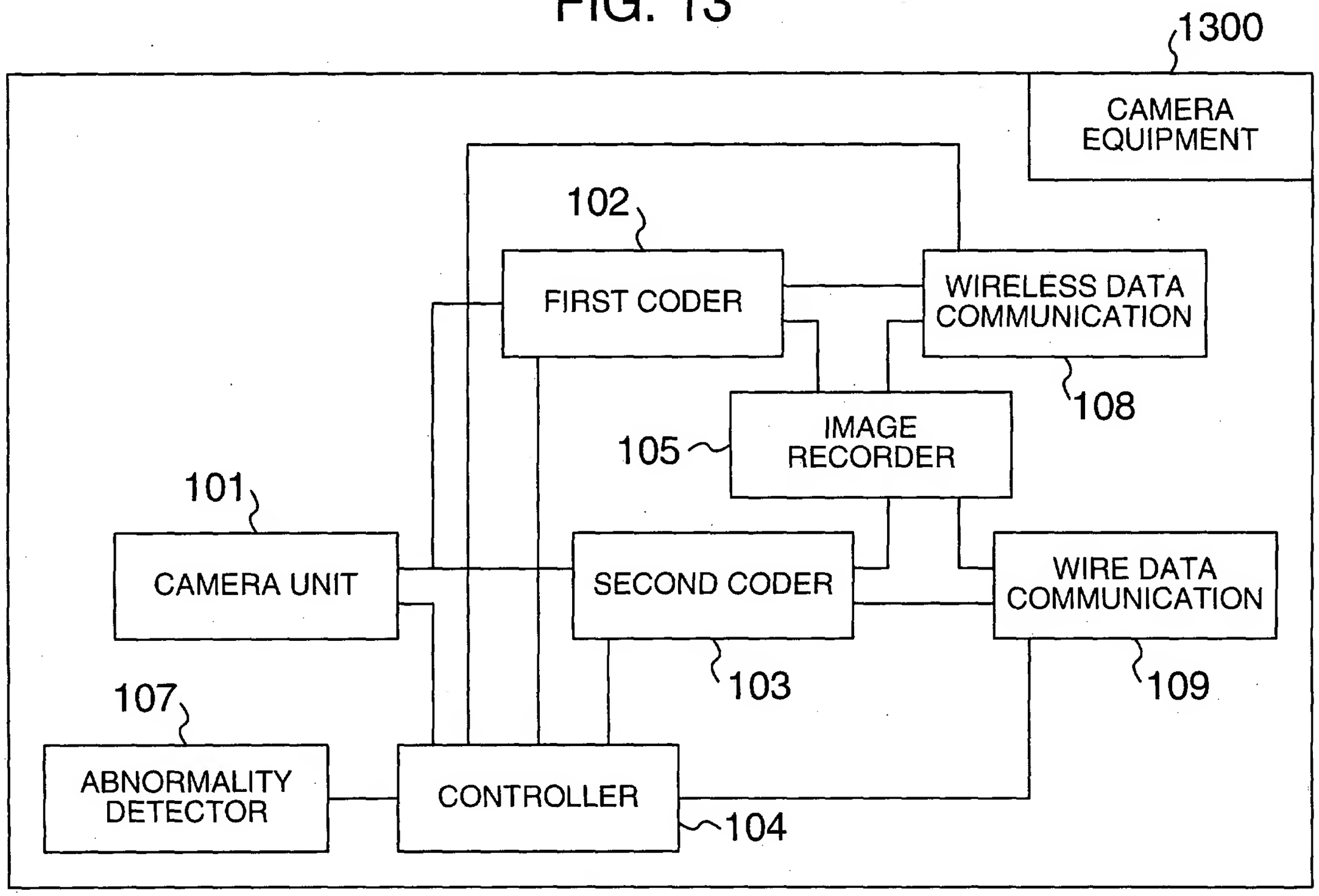

1300
CAMERA EQUIPMENT
102
FIRST CODER
WIRELESS DATA COMMUNICATION
108
105
IMAGE RECORDER
101
CAMERA UNIT
SECOND CODER
WIRE DATA COMMUNICATION
103
109
107
ABNORMALITY DETECTOR
CONTROLLER
104

FIG. 14

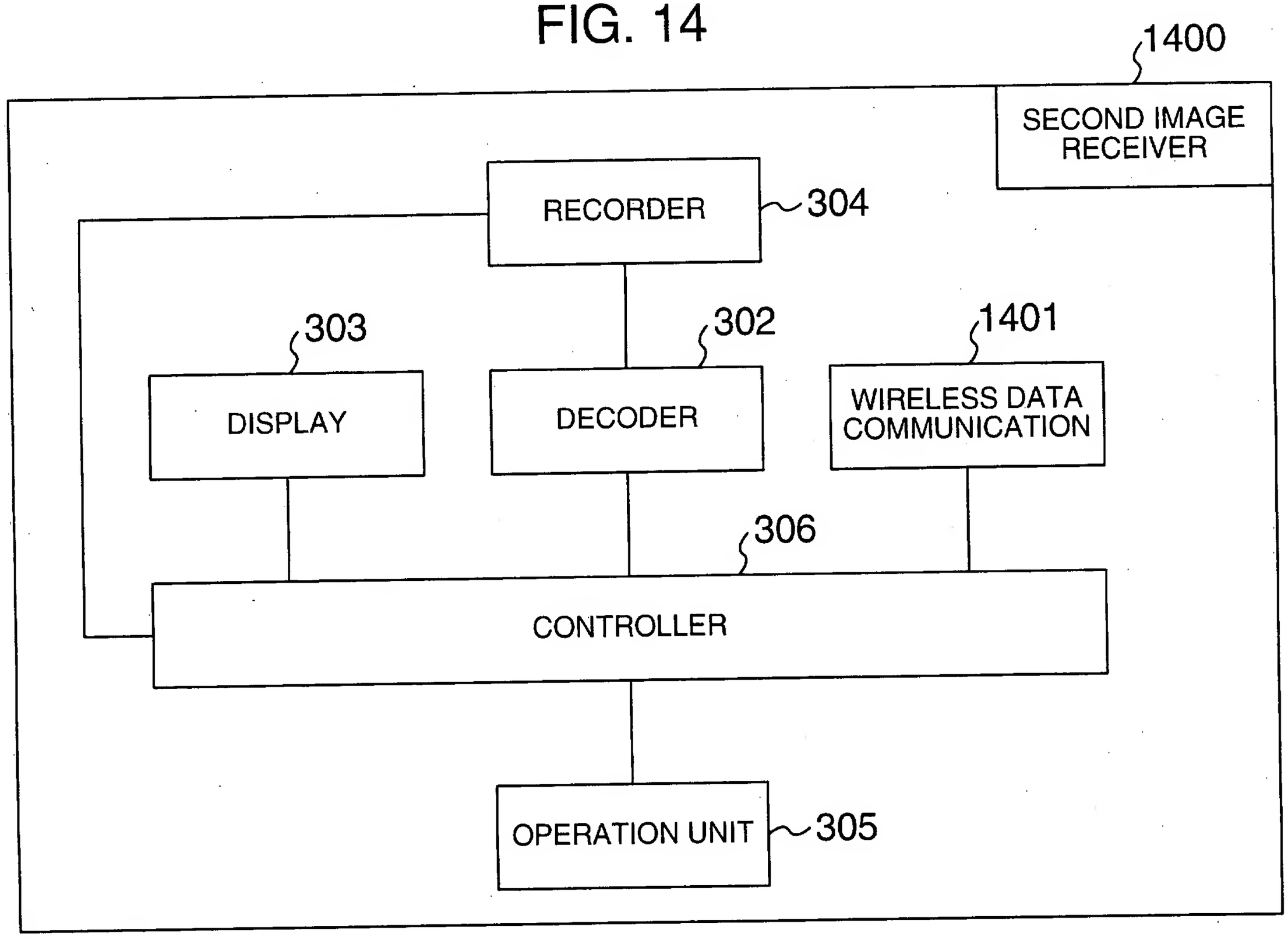

1400
SECOND IMAGE RECEIVER
RECORDER
304
303
DISPLAY
302
DECODER
1401
WIRELESS DATA COMMUNICATION
306
CONTROLLER
OPERATION UNIT
305

FIG. 15

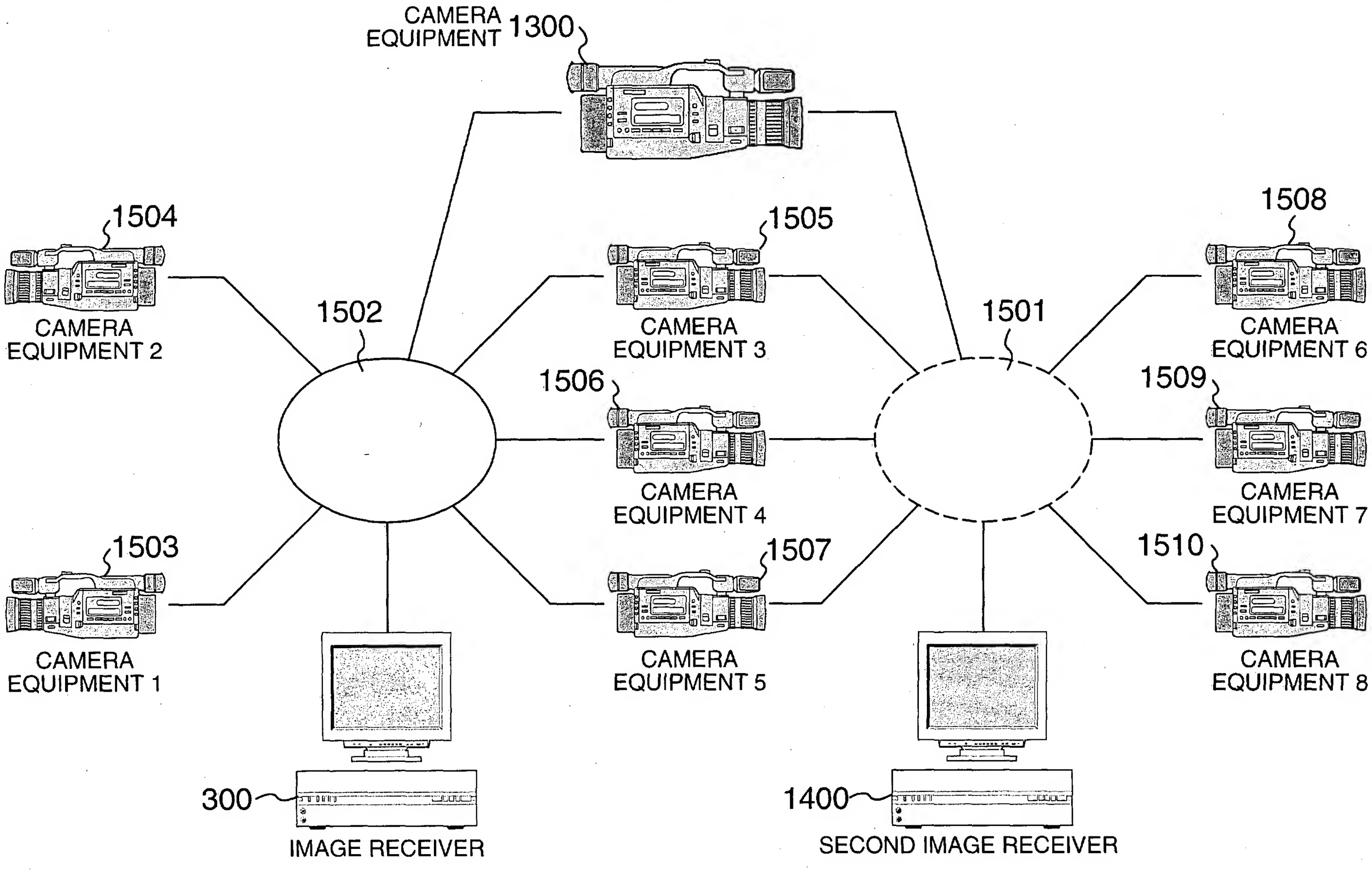

CAMERA EQUIPMENT 1300
1504
CAMERA EQUIPMENT 2
1502
1505
CAMERA EQUIPMENT 3
1501
1508
CAMERA EQUIPMENT 6
1506
CAMERA EQUIPMENT 4
1509
CAMERA EQUIPMENT 7
1503
CAMERA EQUIPMENT 1
1507
CAMERA EQUIPMENT 5
1510
CAMERA EQUIPMENT 8
300
IMAGE RECEIVER
1400
SECOND IMAGE RECEIVER

FIG. 16

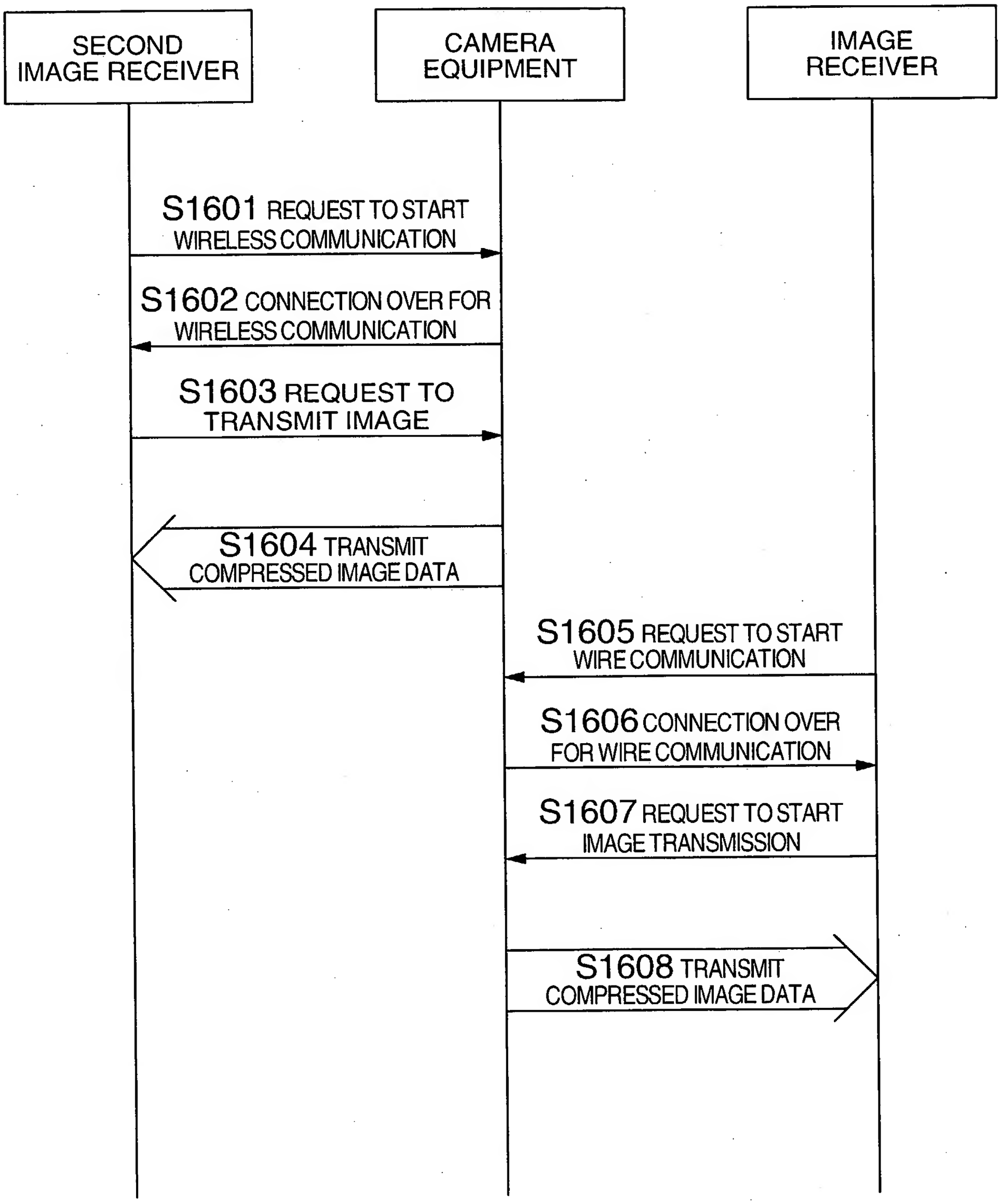

SECOND IMAGE RECEIVER
CAMERA EQUIPMENT
IMAGE RECEIVER
S1601 REQUEST TO START WIRELESS COMMUNICATION
S1602 CONNECTION OVER FOR WIRELESS COMMUNICATION
S1603 REQUEST TO TRANSMIT IMAGE
S1604 TRANSMIT COMPRESSED IMAGE DATA
S1605 REQUEST TO START WIRE COMMUNICATION
S1606 CONNECTION OVER FOR WIRE COMMUNICATION
S1607 REQUEST TO START IMAGE TRANSMISSION
S1608 TRANSMIT COMPRESSED IMAGE DATA

FIG. 17

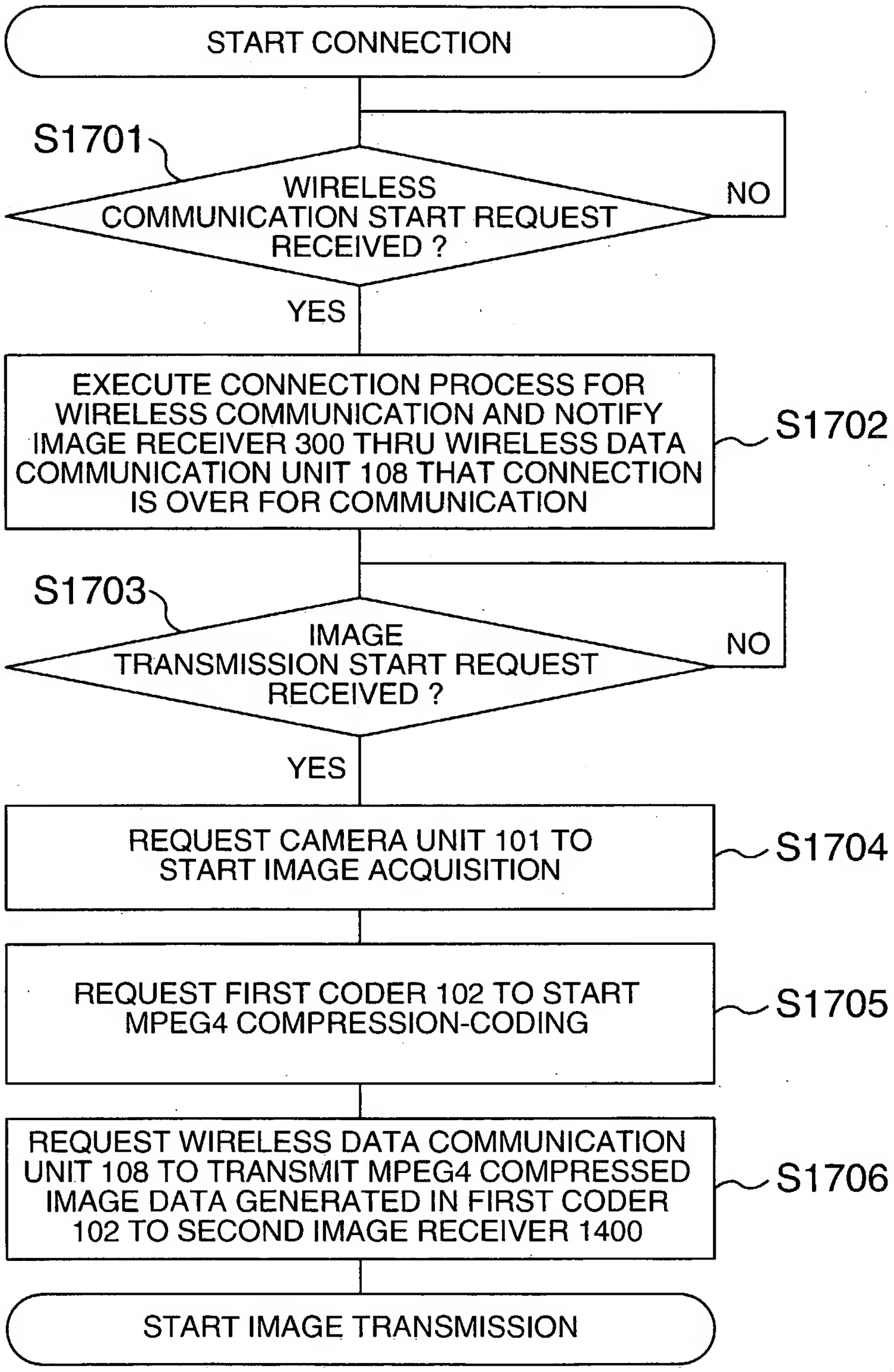
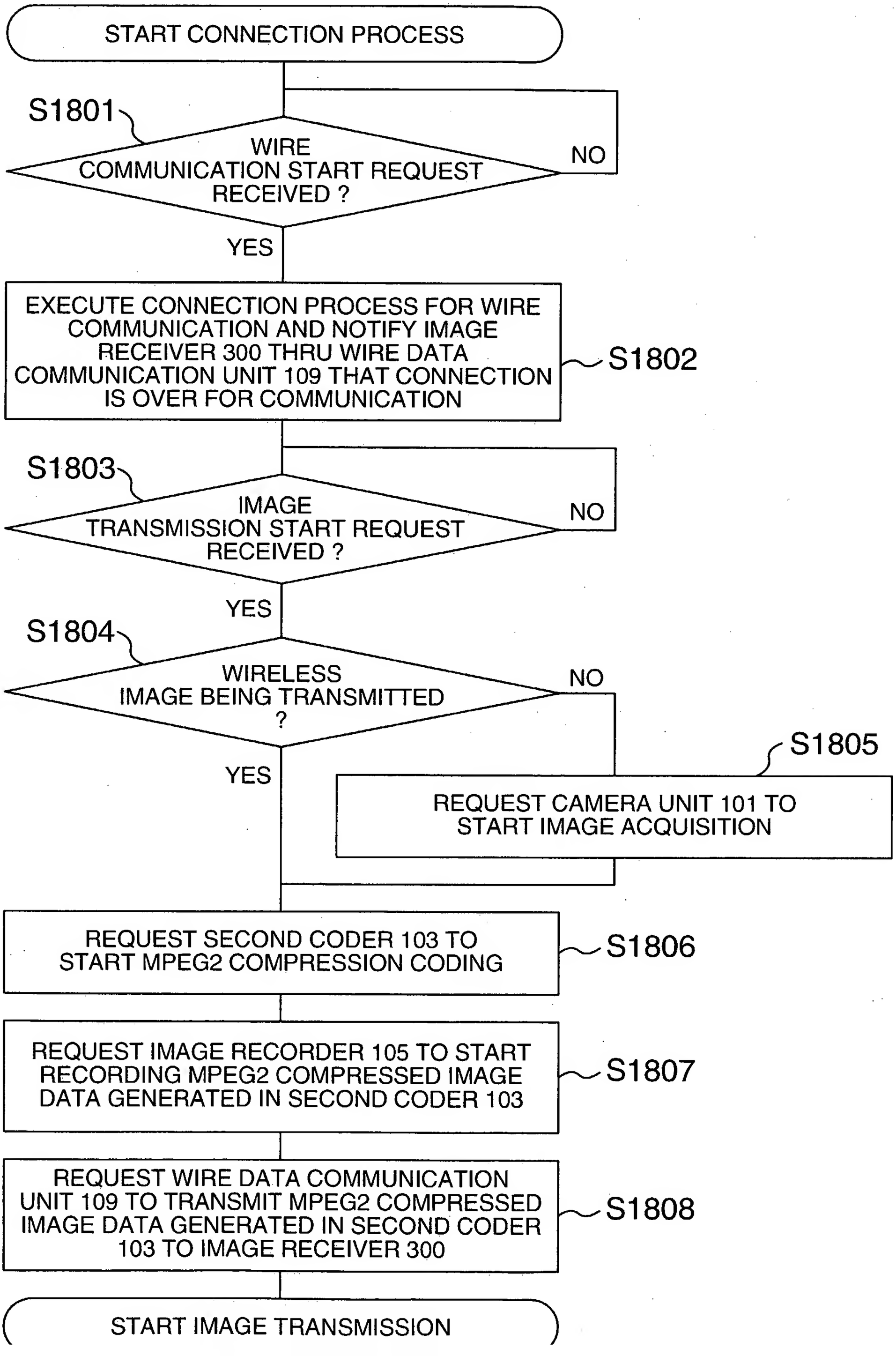

START CONNECTION
S1701
WIRELESS COMMUNICATION START REQUEST RECEIVED ?
NO
YES
EXECUTE CONNECTION PROCESS FOR WIRELESS COMMUNICATION AND NOTIFY IMAGE RECEIVER 300 THRU WIRELESS DATA COMMUNICATION UNIT 108 THAT CONNECTION IS OVER FOR COMMUNICATION
S1702
S1703
IMAGE TRANSMISSION START REQUEST RECEIVED ?
NO
YES
REQUEST CAMERA UNIT 101 TO START IMAGE ACQUISITION
S1704
REQUEST FIRST CODER 102 TO START MPEG4 COMPRESSION-CODING
S1705
REQUEST WIRELESS DATA COMMUNICATION UNIT 108 TO TRANSMIT MPEG4 COMPRESSED IMAGE DATA GENERATED IN FIRST CODER 102 TO SECOND IMAGE RECEIVER 1400
S1706
START IMAGE TRANSMISSION

FIG. 18


START CONNECTION PROCESS
S1801
WIRE COMMUNICATION START REQUEST RECEIVED ?
NO
YES
EXECUTE CONNECTION PROCESS FOR WIRE COMMUNICATION AND NOTIFY IMAGE RECEIVER 300 THRU WIRE DATA COMMUNICATION UNIT 109 THAT CONNECTION IS OVER FOR COMMUNICATION
S1802
S1803
IMAGE TRANSMISSION START REQUEST RECEIVED ?
NO
YES
S1804
WIRELESS IMAGE BEING TRANSMITTED ?
NO
YES
S1805
REQUEST CAMERA UNIT 101 TO START IMAGE ACQUISITION
REQUEST SECOND CODER 103 TO START MPEG2 COMPRESSION CODING
S1806
REQUEST IMAGE RECORDER 105 TO START RECORDING MPEG2 COMPRESSED IMAGE DATA GENERATED IN SECOND CODER 103
S1807
REQUEST WIRE DATA COMMUNICATION UNIT 109 TO TRANSMIT MPEG2 COMPRESSED IMAGE DATA GENERATED IN SECOND CODER 103 TO IMAGE RECEIVER 300
S1808
START IMAGE TRANSMISSION